



# Partnership Accelerates Availability of Online Soils Data for Minnesota

## Featured Project

Accurate soils information is essential for evaluating the potential for land to support development, crop and forest production, and for identifying the most suitable locations for conservation practices and other land uses. Readily accessible local soil information is critical to informing conservation decisions and provides a foundation for sustainable land use planning. The soil survey is the mechanism for how this basic natural resource information is made available to land use authorities and landowners to make the best land use decisions. Examples of day to day uses of soils data include:

- Landowners and government agencies use soils data to determine whether a site is suitable for an intended land use.
- Soil productivity has a correlation to land value, so the Minnesota Department of Revenue requires soil survey-supplied data on the Certificate of Real Estate Value, a common form in Real Estate Transactions.
- Minnesota Pollution Control Agency uses soils data to provide interpretations needed for identifying the location and size of on-site treatment systems.
- USDA rental rates for the Conservation Reserve Program are based on soils data.
- Landowners and other conservationists depend on soils data to calculate herbicide and fertilizer rates, and to select plant species.

As the demands of more increasingly intensive land uses have grown, the USDA began accelerating soil surveys and beginning in 2005 the information was available using a web-based approach.

**Partners:** The National Cooperative Soil Survey program (NCSS) is a nationwide partnership of federal, tribal, state and local agencies, private entities and academic institutions that began over 100 years ago. The first soil surveys in Minnesota were initiated in the early 1900s. Partners in the early days included the U.S. Forest Service and University of Minnesota. Until the late 1970s, soil surveys were conducted and funded nearly exclusively by the federal government. Beginning in the late 1970s, the State of Minnesota and local governments contributed additional financial and personnel resources to complement ongoing USDA funding and accelerate completion of the initial inventory.

Current partners include USDA Natural Resources Conservation Service (NRCS) and U.S. Forest Service (USFS); University of Minnesota; Tribal Governments; State of Minnesota, and local units of government.



The 'gleyed' layer of this soil sample, identified by the grey color, indicates wet soils that are less suitable for some land uses, like crop production or septic system drain fields.

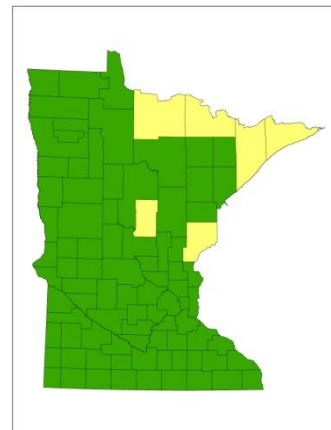
# BWSR Featured Project

The most current official soil survey information, both maps and interpretive data, is now available through the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey website released for public use in 2005 (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>).

**Location:** The areas identified in yellow on the map have yet to be completed as of July 1, 2010.

**Project Timeline:** In Minnesota, the initial soil survey is scheduled to be completed in 87 of the state's 91 soil survey areas by June 30, 2011.

**Project Costs / Funding Sources:** Funding has been provided through a number of sources. However the largest single contributor has been the USDA. In order to accelerate the completion of the Minnesota Soil Survey, additional funding has been provided through the Minnesota Environment and Natural Resources Trust Fund, administered by the Legislative Citizen Commission on Minnesota Resources. A proposal to help complete the inventory of the remaining survey areas by June 30, 2013 is pending. Continued state support is imperative to avoid a several year delay in completion of the initial inventory.



Time period	Number of soil survey areas with soil mapping completed	Federal contribution (estimated)	State (LCMR/LCCMR) contribution (estimated)	Local (county) contribution (estimated)
Pre-1977	21	100%	0	0
1977-1993	57	48% (18.5M)	28% (10.7M)	24% (9.0 M)
1993-1997	2	80%	0	20%
1997-6/30/2011	7	60% (x M)	25% (2.3M)	15% (x M)
Areas remaining	4			